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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/603,613

06/26/2003

Takeshi Miyazaki

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EXAMINER

CHEN, SOPHIA S

ART UNIT

PAPER NUMBER

2852

DATE MAILED: 06/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/603,613

Applicant(s)

MIYAZAKI, TAKESHI

Examiner

Sophia S. Chen

Art Unit

2852

Am

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/4/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because of the following informality: "Fig. 1" should not be labeled because a single figure must not be numbered and the abbreviation "FIG." Must not appear. See MPEP §608.02(u)(1). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The abstract of the disclosure is objected to because of the inclusion of legal phraseology, such as "comprises" (page 28, lines 2 and 9). Correction is required. See MPEP § 608.01(b).

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

5. The disclosure is objected to because of the following informalities:

- a. Page 6, paragraph [0017], line 1, "Fig. 1" should be "The figure".
- b. Page 11, last line, "Fig. 1" should be "The figure".
- c. Page 12, line 20, "Fig. 1" should be "The figure".
- d. Page 12, line 24, "Fig. 1" should be "The figure".

e. Page 13, lines 2-3, "Fig. 1" should be "The figure".

Appropriate correction is required.

***Claim Rejections – 35 U.S.C. §102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3, 5, 6, 8- are rejected under 35 U.S.C. 102(b) as being anticipated by Ozeki et al. (JP 07-276782)

Ozeki et al. discloses an image forming method and apparatus comprising: first step or means I for applying fusible powder toner to a recording medium P to form a toner image; second step or means II for apply liquid ink containing a coloring material to the recording medium P to form an ink image; third step or means III for thermal fixing an image formed by the first and second steps or means (abstract and Figure 8); fixing means (fourth step) 12 for semi-fixing the toner image formed by the first means I (Figure 8); and the fixing means 12 comprising a pressurizing fixing means 12b.

Ozeki et al. further discloses the fusible powder toner contains a black coloring agent (abstract); the liquid ink comprises inks of the four (or three) colors of yellow Y, magenta M, cyan C, and black BK (abstract; paragraph [0030]; Figures 2 and 8); and the second means (or step) applies liquid ink to the recording medium P by in-jet recording (abstract).

***Claim Rejection – 35 U.S.C. §103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozeki et al. in view of Jeanmaire et al. (U.S. Pat. No. 6,588,888)

Ozeki et al., as discussed above, differs from the instant claimed invention in not disclosing the contents of the liquid ink.

Jeanmaire et al. discloses an ink-jet printing method comprising that ink can be of any type, including aqueous and non-aqueous solvent based inks containing either dyes or pigments, etc. (column 9, lines 26-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the coloring material and a non-aqueous solvent as taught by Jeanmaire et al. to the liquid ink of Ozeki et al. because Jeanmaire et al. teaches that the liquid ink having a coloring material and a non-aqueous solvent is common and well known in the ink-jet art.

***Other Prior Art***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hashiguchi et al. (U.S. Pat. No. 5,444,518) discloses an image forming apparatus comprising toner image forming means; ink image forming means; and fixing means for fixing both toner image and ink image.

Sakaizawa et al. (U.S. Pat. No. 5,570,451) discloses an image forming apparatus comprising toner image forming means; ink image forming means; and fixing means for fixing the toner image.

Sakaizawa et al. (U.S. Pat. No. 5,729,785) discloses an image forming apparatus comprising toner image forming means; ink image forming means; and fixing means for fixing the toner image.

Baker et al. (U.S. Pat. No. 5,761,565) discloses an image forming apparatus comprising toner image forming means; ink image forming means; and fixing means for fixing the toner image.

Jeanmaire (U.S. Pat. Pub. No. US 2002/0171716 A1) discloses an ink-jet printing method comprising that ink can be of any type, including aqueous and non-aqueous solvent based inks containing either dyes or pigments, etc.

Miyazaki et al. (U.S. Pat. Pub. No. US 2003/0063912 A1) discloses an image forming apparatus comprising toner image forming means; ink image forming means; and fixing means for fixing the toner image.

Nagano (JP 04-069694) discloses an image forming apparatus comprising ink image forming means; toner image forming means; and fixing means for fixing both toner and ink images.

Moriguchi et al. (JP 05-031966) discloses an image forming apparatus comprising toner image forming means; ink image forming means; and fixing means for fixing both toner and ink images.

Mikami (JP 08-185077) discloses an image forming apparatus comprising toner image forming means; ink image forming means; and fixing means for fixing the toner image.

Umeda et al. (JP 2002-361939) discloses an image forming apparatus comprising toner image forming means; ink image forming means; and fixing means for fixing both toner and ink images.

#### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sophia S. Chen whose telephone number is (703) 308-7617. The examiner can normally be reached on M-F (7:00-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on (703) 308-1373. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sophia S. Chen  
Primary Examiner  
Art Unit 2852

Ssc  
June 7, 2004